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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/668,480

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27799

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EXAMINER

KHAN, USMAN A

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/668,480	Applicant(s) ATARASHI ET AL.	
	Examiner USMAN KHAN	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 25-30, 37-40 and 50 is/are pending in the application.
- 4a) Of the above claim(s) 8-16, 25-30 and 37-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's arguments filed on 07/27/2009 with respect to claims 1-7 and 50 have been considered but are not persuasive.

Please refer to the following office action, which clearly sets forth the reasons for non-persuasiveness.

Regarding **claims 1-7 and 50**, Applicant argues that one skilled in the art will understand MIYAKE's sealing resin 9 as a shapeless substance, which can deform to conform to the optical element 3 for sealing purpose. Consequently, MIYAKE's sealing resin 9 does not have any positioning function. In other words, the sealing resin 9 cannot be arranged at a prescribed position on the substrate 1 through engagement with the optical member 3 so that a center of a light-receiving surface 2a of the imaging element 2 agrees with a center of an optical axis of the imaging lens section 3a of the optical member 3. In fact, the optical element 3 in MIYAKE is assembled within the opening section I a of the substrate 1 before the resin 9 is formed on the optical element 3 (see, e.g., Figs. 12 and 13 and paras. [0021] and [0055] of MIYAKE). Therefore, the resin 9 in MIYAKE has no function of centering the lens portion of the optical element 3 in relation to the imaging element 2. Therefore, MIYAKE does not teach "the outer frame member is arranged at a prescribed position on the base board so that a center of a photoelectric conversion portion of the image pickup element agrees with a center of an optical axis of the lens portion of the optical member," as recited in independent claim 1. Accordingly independent claim 1 and its dependent claims 2-7 patentably distinguish over MIYAKE.

However, the examiner kindly notes that: the sealing resin 9 of MIYAKE is in fact located at a prescribed position on the base board so that a center of a photoelectric conversion portion of the image pickup element agrees with a center of a optical axis of the lens portion of the optical member as shown by figures 12 - 13 and also as discussed in 0052 – 0058. Also as shown by at least figures 12 - 13 the lens portion of optical element which is centered with the imaging element.

2. Applicant has canceled claims 45 – 46 and 48 - 49 to overcome the double patenting objection provided in the previous office action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 - 7 and 50 are rejected under 35 U.S.C. 102(b) as being anticipated by MIYAKE (EPO Patent NO. EP1148716A1).

Regarding **claim 1**, MIYAKE teaches an image pickup device comprising:

(a) a base board on which an opening portion is formed (figures 1 and 2A, item 1 with opening 1A);

(b) an image pickup element provided on a reverse surface of the base board so that at least a part of the opening portion is covered (figures 1 and 2A item 2);

(c) an optical member (figure 1 items 3 and 3a in combination) including a lens portion (figure 1 item 3a) to form an image of an object onto the optical pickup element (figures 1, 4B, 5, and 8-10), a leg portion to support the lens portion (figures 1, 4B, 5, and 8-10 item 3; the examiner can broadly consider the sides of item 3 as a leg portion), and a contact portion to be brought in contact with the image pickup element (figures 1, 4B, 5, and 8-10; item 3 bottom and item 2 contact each other), the optical member configured for converging light incident on the image pickup element (figures 1, 4B, 5, and 8-10), the optical member being provided so as to come in direct contact with a front surface of the image pickup element from the front surface of the base board

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through the opening portion (figures 1, 4B, 5, and 8-10; item 3 bottom and item 2 contact each other); and

(d) an outer frame member provided on the base board to cover the optical member and the opening portion (figures 12-13 item 9), an inner surface of the outer frame member being engaged with the optical member (figures 12-13 item 9), wherein the outer frame member is arranged at a prescribed position on the base board so that a center of a photoelectric conversion portion of the image pickup element agrees with a center of an optical axis of the lens portion of the optical member (figures 12-13 item 9).

Regarding **claim 2**, as mentioned above in the discussion of claim 1, MIYAKE in view of Kingsley et al. teach all of the limitations of the parent claim. Additionally, MIYAKE teaches that the optical member comprises a portion to be engaged that is fitted in the outer frame member to prevent that the optical member rotates about an optical axis of the optical member, and the outer frame member comprises an engaging portion that is fitted in the portion of the optical member (figures 12-13 items 3/3a/3c and 9 are engaged).

Regarding **claim 3**, as mentioned above in the discussion of claim 1, MIYAKE in view of Kingsley et al. teach all of the limitations of the parent claim. Additionally, MIYAKE teaches that the optical member comprises a first optical member that comes in contact with a surface of the image pickup element (figure 1 item 3), and at least one auxiliary optical member which is stacked on the first optical member so that an optical

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axis of the auxiliary optical member agrees with an optical axis of the first optical member (figure 1 item 3a).

Regarding **claim 4**, as mentioned above in the discussion of claim 1, MIYAKE in view of Kingsley et al. teach all of the limitations of the parent claim. Additionally, MIYAKE teaches that the base board has electric parts thereon for processing an image (figure 2 item 1b circuit pattern; also figure 14 and paragraph 0061 page 9; ASIC OR DSP item 10).

Regarding **claim 5**, as mentioned above in the discussion of claim 1, MIYAKE in view of Kingsley et al. teach all of the limitations of the parent claim. Additionally, MIYAKE teaches that the prescribed electric parts are arranged on the base board that is covered by the outer frame member (figure 2 item 1b circuit pattern; also figure 14 and paragraph 0061 page 9; ASIC OR DSP item 10; also outer frame member figures 12-13 item 9).

Regarding **claim 6**, as mentioned above in the discussion of claim 4, MIYAKE in view of Kingsley et al. teach all of the limitations of the parent claim. Additionally, MIYAKE teaches that at least a part of the electric parts is arranged in the vicinity of a fixed position at which the outer frame member is fixed (figure 2 item 1b circuit pattern; also figure 14 and paragraph 0061 page 9; ASIC OR DSP item 10; also outer frame member figures 12-13 item 9).

Regarding **claim 7**, as mentioned above in the discussion of claim 4, MIYAKE in view of Kingsley et al. teach all of the limitations of the parent claim. Additionally, MIYAKE teaches that a photoelectric conversion section is provided on the front surface at a position corresponding to the opening portion to convert incident light to an electric signal (figures 1, 4B, 5, and 8-10; item 2 with side closer to the opening of item 1), and the optical member is arranged to focus an object image by converging the incident light onto the photo-electric conversion section (figures 1, 4B, 5, and 8-10 item 3/3a focus light on item 2).

Regarding **claim 50**, as mentioned above in the discussion of claim 1, MIYAKE in view of Kingsley et al. teach all of the limitations of the parent claim. Additionally, MIYAKE teaches that the outer frame member positions the optical member on the base board so that the center of the optical axis of the lens portion of the optical member agrees with the center of the photoelectric conversion portion of the image pickup element (figures 12-13 item 9 in relation with items 3, 3a, and 2 and 2a).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yamaguchi et al. (US patent No. 7,528,880) teaches an imager mounted on a board and the imager enclosed in a casing with the lens set touching the imager.

5. **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
6. a shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usman Khan whose telephone number is (571) 270-1131. The examiner can normally be reached on Mon-Fri 6:45-3:15.
8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Usman Khan/
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11/05/2009
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